

### Abstract of the Disclosure

Provided is a thin film deposition reactor. The reactor includes a reactor block including a wafer block on which a wafer is mounted; a top lid for covering and sealing the reactor block; a showerhead disposed under the top lid and connected to an RF power supply unit, the showerhead having first nozzles and second nozzles that are not combined with each other; a showerhead isolation assembly having a plurality of gas curtain holes for forming a gas curtain around the wafer block, the showerhead isolation assembly for isolating the top lid from the showerhead; a top lid isolation flow line disposed on the top lid, the top lid isolation flow line having a first flow line and a second flow line that are connected to the first nozzles and the second nozzles, respectively, and are each bent at a right angle at least once.